

Call notice for the selection of a candidate for Portuguese Competence Centre in Semiconductors

Overview and objectives

Axis 1 of the **National Strategy for Semiconductors**, promulgated in Resolution of the Council of Ministers nº12/2024, of 8 January, means the reinforcement of specialised training and specific skills in the area of microelectronics and semiconductors, and foresees the creation in Portugal of a **Competence Centre dedicated to the areas of microelectronics and semiconductors**, enabling it as a national entity responsible for:

Specialised training and support for the national ecosystem

- Monitoring the national panorama, in order to regularly update the panorama of companies, research centres and units dedicated to training active in the area and present in Portugal. Detail the type of activity, specific area, size, among other relevant parameters, that can be continuously used by the competent entities for better organisation, structuring and financing of national activities;
- Assessment of immediate and medium/long-term needs, in terms of talent and specific training, of national companies active in the sector, allowing universities and institutes to focus on future training and the definition of professional training based on the needs of the existing ecosystem;
- Establishment of working groups that regularly review industry needs, facilitating the rapid identification of collaboration opportunities between companies in the sector and Portuguese educational institutions, increasing the probability of identifying common interests for the launch of joint investment programs, thus strengthening the ecosystem and expanding the visibility of the area in academia, for greater mobilisation and attraction of talent;
- Identification of national experts in critical areas, both at a theoretical and applied level, with experience in R&D and/or in an industrial context, who can provide technical contributions and provide training;
- Promotion and conception of professional internships in national and international companies, through partnerships, protocols and strategic agreements, complementary to academic curricula or in the format of internships open to the community with skills in adjacent areas (reskilling) or already relevant to the sector (upskilling);
- Promotion of the areas of microelectronics and semiconductors at primary and secondary education level, through small projects and practical demonstrations, attracting young people's interest in this sector in close collaboration with *Ciência Viva*;

- Support to activities in the area of microelectronics and semiconductors, helping companies and academia to develop and/or integrate technologies into their processes;
- Advising new start-up companies in this sector, mediating their need for capital and operational factors, when approaching relevant national authorities;
- Community awareness, through the promotion of tools created at national level, the promotion of services and technology developed in Portugal and the promotion of success stories;
- Support to relevant national government entities, within the scope of new policies and the review of the national strategy, when necessary.

Access to the international network and the EU Chips Act tools

- Representation at national level as an access point to the European network of Competence Centres in the field of microelectronics and semiconductors, helping companies and/or national academic entities to obtain support from other European centres in case necessary skills do not fit into their areas of specialisation. Also, connecting with Digital Innovation Hubs (DIH) or other relevant and existing innovation ecosystems, both at national and international levels. Use of these same channels to encourage the exchange of experts;
- Promotion of relevant European and international collaboration and funding opportunities;
- Provision of services that facilitate access to the European Design Platform, providing training and development of skills for its effective use;
- Facilitating access to EDA tools, via the Design Platform, creating a connection point between Portuguese entities and platform management authorities;
- Promotion, support and organisation of access to chip manufacturing facilities, for agile and efficient aggregation and execution of projects (tape-out), facilitating access to prototyping and testing services for small production volumes through existing European infrastructure;
- Provision of services that facilitate access and use of European Pilot Lines, allowing the creation of prototypes and experimentation with innovative technologies, giving them greater commercialisation potential at reduced costs;
- Promotion of access to the “Chips Fund”, facilitating access to risk capital;
- Facilitation of strategic partnerships with European and international companies in the field of advanced packaging, assembly and testing of devices, promoting current and future capabilities in Portugal;
- Promotion of the connection between back-end activities in Portugal and pilot line activities at European level, in particular, within the scope of projects linked to heterogeneous packaging and chiplet technology;
- Organisation of technical workshops, discussion fora and other initiatives that regularly bring together the international ecosystem in Portugal.

The Portuguese Competence Centre in Semiconductors will be integrated into the European network of Competence Centres, as provided for in Article 11, paragraph 3, of the European Regulation on Integrated Circuits (“*EU Chips Act*”), where it is stated that “*Member States shall designate candidate competence centres in accordance with their national procedures, administrative and institutional structures through an open and competitive process*”.

Under these terms, this Call Notice is the basis for the pre-selection process of the national candidate. The pre-selection process thus aims to identify one **national consortium**, which, after evaluation, will receive a letter of support to be used in their application for the European call.

In the European call, **one consortium** will be selected/validated to represent the Portuguese Competence Centre, in accordance with the terms of the topic “2.4 Chips-CCC-1: Competence centres” of the Chips JU Work Programme 2023-27 – appendix 4 – 2024 (“Initiative”), being allocated the financing described below, in the “Funding” section.

Who can apply

A consortium composed of entities from the national semiconductor ecosystem, including:

- Higher education institutions, their institutes and R&D units.
- State Laboratories, Associated or international Laboratories with headquarters in Portugal.
- Private non-profit institutions whose main purpose is R&D activities, including Collaborative Laboratories (CoLabs) and Technology and Innovation Centres (CTI).
- Other public and private non-profit institutions that develop or participate in scientific research activities, training of qualified human resources, and/or private investment in the area of semiconductors and related areas.

The formation of the consortium and, in particular, the constitution of the respective coordinating entity, must consider that the Competence Centre will provide services on a free basis (“not -for-profit”) or at reduced prices.

How to apply

Applications must be submitted, in English, from 7 March 2024 not later than 17h, Lisbon time, on **7 May 2024**, through the [Application Form](#) and [respective Annex 1](#).

The Application Form and Annex 1 must be sent to the email address kdt@fct.pt by the deadline indicated above.

Eligibility and evaluation

In order to ensure that the Competence Centre covers in its activities the whole country, it is established an **eligibility criterion** whereby a consortium needs to include a minimum of three independent national entities.

The evaluation of eligible applications will be carried out by a panel of experts (to be appointed) with the support of FCT and ANI.

The methodology for selecting and ranking applications is based on the evaluation criteria defined for the selection of Competence Centres in the Chips Joint Undertaking call:

Evaluation criterion 1 – Relevance (CA1):

- Alignment with the objectives and activities in Axis 1 of the National Strategy for Semiconductors (Resolution of the Council of Ministers no. 12/2024, of 8 January) and in the topic “2.4 Chips-CCC-1: Competence centres” of the Chips JU Work Programme 2023-27 – appendix 4 – 2024 (“Initiative”).
- Contribution to long-term policy objectives, as well as relevant policies and strategies, and synergies with activities at European and national level.

Evaluation criterion 2 – Implementation (CA2):

- Maturity of the proposed Competence Centre based on its activity and recognition in the area (examples: funded European and national projects, submitted patents, scientific articles and training of human resources at bachelor, master and doctorate levels).
- Soundness of the implementation plan and efficient use of resources.
- Capacity of the applicants and of the consortium as a whole to carry out the proposed work.
- Complementarity level of the competence centre and added value compared to their European counterparts.

Evaluation criterion 3 – Impact (CA3):

- Extent to which the project will achieve the expected results and deliverables referred to in topic “2.4 Chips-CCC-1: Competence centres” of the Chips JU Work Programme 2023-27 – appendix 4 – 2024 (“Initiative”) and, where relevant, in plans to publicize and communicate project achievements.
- Extent to which the project will strengthen the competitiveness of the national semiconductor sector and bring benefits to society.
- Extent to which the project be able to achieve the objectives in terms of training, outlined in Axis 1 of the National Strategy for Semiconductors (Resolution of the Council of Ministers no.

12/2024, of 8 January), covering activities from basic and secondary, university education levels to professional training.

Evaluation criterion 4 – Technological Scope (CA4):

- Educational and technical capacity in the various areas defined in the National Strategy for Semiconductors, particularly with regard to:
 - a) chip design;
 - b) advanced packaging;
 - c) emerging areas: integrated photonic circuits, cointegration of emerging technologies, flexible and sustainable electronics and sensors.

The methodology for selecting and ranking applications is based on the Project Merit (PM) indicator, which equals the sum of the scores awarded in each of the evaluation criteria indicated above. Each evaluation criterion will be scored on a scale of 1 to 5. Applications must achieve a minimum of 3 points in each criterion to be qualified.

$$PM = 0.15 \cdot CA1 + 0.4 \cdot CA2 + 0.15 \cdot CA3 + 0.3 \cdot CA4$$

It will be pre-selected at national level **one candidate consortium** for the **Portuguese Competence Centre in Semiconductors**, to which corresponds the highest awarded PM value.

The pre-selected candidate may subsequently apply to the European call under the terms of topic “2.4 Chips-CCC-1: Competence centres” of the Chips JU Work Programme 2023-27 – appendix 4 – 2024 (“Initiative”).

Funding

Funding for the Competence Centres in Semiconductors integrated in the European network consists of two components:

- Co-funding from the European Union, through the Chips Joint Undertaking, up to a maximum amount of €1 million per year, for a period of four years.
- National co-financing, through FCT, up to a maximum amount of €1 million per year, for a period of four years.

European Union co-funding will match national co-funding up to the maximum value indicated above. In other words, for example, for a Competence Centre with national co-funding of €900 thousand, the European Union co-funding will be €900 thousand, resulting in a total funding of €1.8 million.

The national pre-selection process will result in one candidate. **However, national co-funding will only be granted to the project corresponding to the candidate that is finally selected/validated**

for funding in the selection process for the European network of Competence Centres under the terms of topic “2.4 Chips-CCC-1: Competence centres” of the Chips JU Work Programme 2023-27 – appendix 4 – 2024 (“Initiative”).

The pre-selection of a candidate through the process presented in this Call Notice represents a commitment to national co-funding through FCT which is **indicative and conditioned** to the selection of a Portuguese Competence Centre in the call for the European network of Competence Centres implemented by Chips Joint Undertaking.

Applicable Legislation and Regulation

The pre-selection call of the candidate for the Portuguese Competence Centre in semiconductors is governed by this Call Notice, by the National Strategy for Semiconductors promulgated in [Resolution of the Council of Ministers no. 12/2024 of 8 January](#), by the [European Regulation on the EU Chips Act](#) and the topic “2.4 Chips-CCC-1: Competence centres” of the “Chips for Europe Initiative” component of the [2024 Work Programme Chips Joint Undertaking](#).

It is recommended that applicants read all documentation supporting this call.

Contacts

For more information about this call, contact us via email: kdt@fct.pt.